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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (cancel)

Claim 2 (currently amended): The method of claim [[2]] 5 wherein the first voltage is a nominal operating voltage and the second voltage is a reduced voltage that is defined during manufacture of the integrated device.

Claim 3 (canceled)

Claim 4 (original): The method of claim 2 wherein the second voltage is stored into a plurality of fuses.

Claim 5 (currently amended): ~~The method of claim 1~~ A method comprising:  
enabling a reduced power operating mode in response to a thermal condition for an  
integrated device;

changing the integrated device's voltage from a first voltage to a second voltage upon  
activation of the reduced power operating mode;

operating the integrated device at a frequency within an operating range based at least in  
part on a desired amount of power reduction, wherein a bus ratio utilized in the reduced power  
operating mode is less than a maximum bus ratio for the integrated device and is calculated  
based on subtraction of an offset from the maximum bus ratio, the offset is based at least in part  
on ~~a~~ the supported bus frequency of the integrated device.

Claim 6 (currently amended): The method of claim [[2]] 5 wherein the integrated device  
is a processor.

Claims 7 – 23 (canceled)

Claim 24 (previously presented): An apparatus comprising:  
  
a thermal monitor to be enabled if a temperature of an integrated circuit meets or exceeds  
a threshold value;

a multiplexer to receive a plurality of offset values and a bus frequency that is supported by the integrated circuit and to forward one of the offset values based at least in part on the bus frequency; and

a logic unit to determine a thermal event bus ratio based on a difference between an initial bus ratio and the selected offset value, determine if the thermal event bus ratio is at least equal to a minimum bus ratio, and to change a voltage and frequency of the integrated circuit if the temperature meets or exceeds the threshold value.

Claim 25 (previously presented): The apparatus of claim 24, wherein the thermal monitor is to be disabled if the thermal event bus ratio is below the minimum bus ratio.

Claim 26 (previously presented): The apparatus of claim 25, wherein the integrated circuit comprises a processor.

Claim 27 (previously presented): The apparatus of claim 24, wherein the changed voltage corresponds to a lowest voltage capable of operation of the integrated circuit in response to a thermal issue.

Claim 28 (previously presented): The apparatus of claim 27, wherein a value of the changed voltage is stored in a fuse of the integrated circuit.

Claim 29 (previously presented): The apparatus of claim 27, wherein the changed frequency in response to the thermal issue is within an operating range between the minimum bus ratio and a maximum thermal event bus ratio available at the lowest voltage.

Claim 30 (currently amended): A system comprising:

a processor including a thermal monitor to be enabled if a temperature of the processor is at least at a threshold value, a multiplexer to receive a plurality of offset values and a bus frequency that is supported by the processor and to forward one of the offset values based at least in part on the bus frequency, and a logic unit to determine a thermal event bus ratio based on a difference between an initial bus ratio and the selected offset value, determine if the thermal event bus ratio is at least equal to a minimum bus ratio, and to change a voltage and frequency of the processor if the temperature is at least at the threshold value; and

a memory coupled to the processor via a chipset.

Claim 31 (previously presented): The system of claim 30, wherein the thermal monitor is to be disabled if the thermal event bus ratio is below the minimum bus ratio.

Claim 32 (previously presented): The system of claim 31, wherein the changed voltage corresponds to a lowest voltage capable of operation of the processor in response to a thermal issue.

Claim 33 (previously presented): The system of claim 32, wherein a value of the changed voltage is stored in a fuse of the processor.

Claim 34 (previously presented): The system of claim 33, wherein the changed frequency in response to the thermal issue is within an operating range between the minimum bus ratio and a maximum thermal event bus ratio available at the lowest voltage.